Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Luis D. Fuentes

GENERAL INFORMATION:

Name:	Ceradyne, Inc.
Address:	2416 Merchant Street. Lexington, KY 40511
Date application received:	12/18/2008
SIC Code/SIC description:	3999, Manufacturing Industries, Not Elsewhere Classified
Source ID:	21-067-00180
Source A.I. #:	55753
Activity ID:	APE20080002
Permit:	F-06-072 R1

APPLICATION TYPE/PERMIT ACTIVITY:

[ ] Initial issuance	[ ] General permit
[X] Permit modification	[X] Conditional major
__Administrative	[ ] Title V
X Minor	[ ] Synthetic minor
__Significant	[ ] Operating
[ ] Permit renewal	[X] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance [ ] Compliance schedule included

[X] Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

[ ] NSR	[X] NSPS	[X] SIP
[ ] PSD	[ ] NESHAPS	[ ] Other
[ ] Netted out of PSD/NSR	[X]Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

[ ] Acid rain source

[ ] Source subject to 112(r)

[X] Source applied for federally enforceable emissions cap

[ ] Source provided terms for alternative operating scenarios

[ ] Source subject to a MACT standard

[ ] Source requested case-by-case 112(g) or (j) determination

[ ] Application proposes new control technology

[X] Certified by responsible official

[X] Diagrams or drawings included

[ ] Confidential business information (CBI) submitted in application

[ ] Pollution Prevention Measures

[ ] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Emissions Potential (F-06-072 R1)

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM_{10}	0.34	0.8
SO_2	0.024	0.06
NOx	4	6.3
CO	3.4	5
VOC	1.8	< 90
Lead	0.00007	< 9
Benzene	0.00008	< 9
Dichlorobenzene	0.00004	< 9
Formaldehyde	0.003	< 9
Hexane	0.07	< 9
Naphthalene	0.00002	< 9
Toluene	0.0001	< 9
Source wide HAPs	0.01	< 22.5

SOURCE DESCRIPTION:

Ceradyne, Inc. facility, located in Lexington, KY has two process areas: ceramic forms and hot press (armor plates). Ceradyne operates five different manufacturing processes on site: Heating curing and Incinerator, Shot Blast, Power Preparation, Mechanical Pressing, and Binder Removal.

MINOR PERMIT REVISION 1

The source is adding the following equipment:
1- A binder furnace (EU 59) (This furnace will be tied into the EU 54 control device);
2- A diesel emergency generator (EU 16); and
3- A ceramic parts binder removal furnace (Insignificant activity).

The facility is also removing the following processes & equipment from the permit:
1- Grinding booths (EU 05A, EU 05B, EU 06A, EU 06B); and
2- One Armor plate pre-forming (EU 2D).

The following equipment has been removed from the permit with this revision:
1- Line 4
a) The heating and curing line (EU 4D); and
b) An inductotherm incinerator (EU 16).

Note: Line 4 never was installed. An application for adding Line 4 was received on November 22, 2006. On September 22, 2008 another application was received from the source for removing Line 4. As a consequence of this change, all requirements regarding these emission units (EU 4D and EU 16) were removed from the permit.

2- Flaking operation process (All insignificant activities):
a) Mixing flake and wax (EU 08);
c) Armor plate pre-forming (EU 2D);
d) Hot press/ flake spacer press (EU 03); and
e) Flake mill (EU 08).

The source-wide potential emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAPs) will remain below conditional limits; therefore no change in the existing permitted emission limitations was requested with this addition.

OPERATIONAL FLEXIBILITY:

NA